Agricultural Extension Service ● University of Minnesota

FACT SHEET

AGRICULTURAL CHEMICALS NO. 7—1976

GERALD R. MILLER

Chemicals for Weed Control in Soybeans

This fact sheet is intended only as a summary of suggested alternative chemicals for weed control in soybeans. Label information should be read and followed exactly. For further information, see Extension Folder 212, Cultural and Chemical Weed Control in Field Crops.

Selection of an effective chemical or combination of chemicals should be based on consideration of the following factors:

- Clearance status of the chemical
- Use of the crop
- Potential for soil residues that may affect following crops
- Kinds of weeds
- Soil texture
- pH of soil
- Amount of organic matter in the soil
- Formulation of the chemical
- Application equipment available
- Potential for drift problems

Suggestions for chemical control of weeds in soybeans

Method of application Chemical-common name (Trade name[1])	Rate—lb/A of active ingredient or acid equivalent broadcast[2]	Remarks[3]
Preplanting incorporated		
Alachlor (Lasso)	4	Preplanting application of alachlor is suggested if nutsedge is a problem, but for annual grasses only, preemergence application is preferred. Incorporate vernolate immediately after application.
(Lasso II)	3.9	
Dinitramine (Cobex)	1/2 to 2/3	
Profluralin (Tolban)	½ to 1	
Trifluralin (Treflan)	½ to 1	
Vernolate (Vernam)	3	
Preemergence		
Alachlor (Lasso)	2 to 3½	Do not use chlorbromuron, linuron, or metribuzin on sandy soils. Chlorbromuron and linuron are suggested only for soils with between 1 and 4 percent organic matter. Metribuzin should not be used on soils with less than 2 percent organic matter nor on alkaline soils. Several of these preemergence chemicals are effective in combinations over chemicals applied preplanting.
(Lasso II)	2.4 to 3.9	
Chloramben (Amiben)	3	
Chloramben + alachlor	2 + 2	
Chlorbromuron (Maloran) + alachlor	¾ to 2¼ + 1½ to 2½	
Chlorpropham (Furloe Chloro IPC)	2 to 3	
Linuron (Lorox) + alachlor	½ to 1½ + 1 to 3	
Metribuzin (Lexone, Sencor) + alachlor	¼ to ½ + 2 to 2½	
Postemergence (These are suggested for use over preplanting or preemergence herbicides.)		
Bentazon (Basagran)	¾ to 1½	Apply when soybeans are in the first trifoliolate leaf stage for annual broadleaf control. Apply a second treatment for Canada thistle or nutsedge control.
Chloroxuron (Norex, Tenoran)	1 to 1½	Apply when soybeans are in the first trifoliolate leaf stage and weeds are less than 2 inches tall.
2, 4-DB (Butyrac, Butoxone)	1/5	Apply 10 days before soybeans bloom up to mid-bloom or as a directed spray when soybeans are 8 to 12 inches tall.

[1] See table on herbicide names. Trade names are used to identify the herbicide discussed. Omission of other trade names of similar herbicides is unintentional. The inclusion of a trade name does not imply endorsement and exclusion does not imply nonapproval.

[2] These rates will need to be properly interpreted for the formulation you use and for band width and row width if the chemicals are not applied broadcast. See Agricultural Chemicals Fact Sheet No. 5, How to Calculate Herbicide Rates and Calibrate Herbicide Applicators. The proper rate depends on such things as soil characteristics, kinds of weeds, size of weeds and crop, temperature, and moisture conditions.

[3] Read labels for detailed use instructions and restrictions on crop use.

Effectiveness of herbicides on weeds in soybeans

	Preemergence						Preplanting					Postemergence		
	Alachlor (Lasso)	Chloramben (Amiben)	Chlorpropham (Furloe Chloro IPC)	Chlorbromuron (Maloran)	Linuron (Lorox)	Metribuzin (Sencor, Lexone)	Alachlor (Lasso)	Dinitramine (Cobex)	Profluralin (Tolban)	Trifluralin (Treflan)	Vernolate (Vernam)	Bentazon (Basagran)	Chloroxuron (Tenoran, Norex)	2, 4-DB (Butoxone, Butyrac)
Soybean tolerance	G	G	G	F	F	F	G	F	F	F	F	G	F	P
Grasses														
Giant foxtail	G	G	P	F	F	F	G	G	G	G	G	N	P	N
Green foxtail	G	G	P	F	F	F	G	G	G	G	G	N	P	N
Yellow foxtail	G	G	P	F	F	F	G	G	G	G	G	N	P	N
Barnyardgrass	F	G	P	F	F	F	F	G	G	G	G	N	P	N
Nutsedge	G	P	N	P	P	P	G	N	N	N	G	F	N	N
Quackgrass	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Broadleafs														
Black nightshade	G	F	P	P	P	P	G	P	P	P	P	G	—	—
Cocklebur	P	P	P	P	P	F	P	N	N	N	P	G	F	F
Kochia	P	G	F	P	F	G	P	G	G	G	—	—	—	—
Lambsquarters	F	G	P	G	G	G	F	G	G	G	G	P	F	P
Mustard	P	F	F	G	G	G	P	N	N	N	F	G	G	P
Pigweed	G	G	P	G	G	G	G	G	G	G	G	P	F	P
Common ragweed	P	G	P	G	G	G	P	P	N	N	P	G	P	P
Smartweed	P	G	G	F	F	G	P	F	P	P	P	G	P	P
Velvetleaf	P	F	P	F	F	F	P	P	N	N	F	G	P	P
Venice mallow	P	G	G	P	G	G	P	P	P	P	G	G	—	P
Wild sunflower	P	P	P	P	P	F	P	N	N	N	P	G	F	P
Canada thistle	N	N	N	N	N	N	N	N	N	N	N	F	N	N

G = Good, F = Fair, P = Poor, N = None.

Herbicide names and formulations

Common name	Trade name	Concentration and commercial formulation[1]
Alachlor	Lasso	4 lb/gal L
	Lasso II	15% G
Bentazon	Basagran	4 lb/gal L
Chloramben	Amiben	2 lb/gal L, 10% G
Chlorbromuron	Maloran	50% WP
Chloroxuron	Norex, Tenoran	50% WP
Chlorpropham (CIPC)	Furloe Chloro IPC	4 lb/gal L, 10% G
Dinitramine	Cobex	2 lb/gal L
Linuron	Lorox	50% WP
Metribuzin	Lexone, Sencor	50% WP
Profluralin	Tolban	4 lb/gal L
Trifluralin	Treflan	4 lb/gal L, 5% G
2, 4-DB	Butoxone, Butyrac	1.75, 2 lb/gal L
Vernolate	Vernam	6 lb/gal L, 10% G

[1]G = granular, L = liquid, WP = wettable powder.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Roland H. Abraham, Director of Agricultural Extension Service, University of Minnesota, St. Paul, Minnesota 55108. We offer our programs and facilities to all people without regard to race, creed, color, sex, or national origin.

DO NOT USE THIS FACT SHEET AFTER 1976